N311 Care Plan #1

Lakeview College of Nursing

Courtney Thomas

Demographics (5 points)

Date of Admission	**Patient Initials**	**Age**	**Gender**
02/08/2018	BM	65	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Caucasian	Former Waitress	Married	Carbamazepine Iodine Levaquin Varenicline
Code Status	**Height**	**Weight**	
DNR	62.5 in (5'2.5")	180.8 lbs	

Medical History (5 Points)

Past Medical History: Chronic Obstructive Pulmonary Disease (COPD), Sleep Apnea, Epilepsy, Contracture in left hand, Hyperlipidemia, Chronic Respiratory Failure, Difficulty in walking, Depression, Neoplasm, Anxiety, Hypertension, Melanocytic Nevi in upper left arm, Neuropathy, Hemorrhoids, Tremors, Gastro-Esophageal Reflux Disease (GERD), Actinic Keratosis, Neoplasm of brain, Blindness in right eye and Constipation.

Past Surgical History: Could not find in chart; patient states too many to name.

Family History: Maternal—mother: hysterectomy, throat cancer and diabetes.

Paternal—father: Heart disease.

Three sisters—all have diabetes.

Social History (tobacco/alcohol/drugs): Former Smoker. Started at age 16 and stopped at age 56. Smoked one pack a day for 40 years.

Admission Assessment

Chief Complaint (2 points): Difficulty breathing.

History of present Illness (10 points): Patient (pt) complains of difficulty breathing that has been going on for the last several years. It has gotten worse over time and the discomfort is constant. When she exerts herself, it does get more difficult to breathe. She has been on

supplemental oxygen and does take a nebulizer treatment as needed which can help short term. Patient has been seen multiple times for shortness of breath and was diagnosed with Chronic Obstructive Pulmonary Disease (COPD).

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Chronic Obstructive Pulmonary Disease (COPD)

Secondary Diagnosis (if applicable):.

Pathophysiology of the Disease, APA format (20 points):

Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease that causes obstructed airflow from the lungs. Symptoms include breathing difficulty, cough, mucus (sputum) production and wheezing (*COPD* 2020). COPD is a combination of chronic bronchitis (inflammation of the bronchi), emphysema (damage to the alveoli), and hyperreactive airway disease (overreaction of bronchial tubes due to irritant). It is characterized by the features of these three disorders (Capriotti et al., 2020).

Air travels down your windpipe (trachea) and into your lungs through two large tubes (bronchi). Inside your lungs, these tubes divide many times — like the branches of a tree — into many smaller tubes (bronchioles) that end in clusters of tiny air sacs (alveoli). Your lungs rely on the natural elasticity of the bronchial tubes and air sacs to force air out of your body. COPD causes them to lose their elasticity and over-expand, which leaves some air trapped in your lungs when you exhale (*COPD* 2020). This condition can lead to other complications such as respiratory infections, heart problems, lung cancer, high blood pressure and even depression.

COPD is the third leading cause of death in the United States and leading cause of disability. It is estimated that there are 16 million persons with COPD; most are over age 45 (Capriotti et al., 2020). It is believed that the numbers would be much higher if all individuals would seek care when they have certain problems. COPD used to be seen mostly in men but today you will see that more women are actually dying from COPD than men are in the United States. Not only does having COPD disable you and cause you to miss many days of work, it can cause a huge financial burden because the cost of medical care is so high. Smoking is a major cause of COPD, as 90% of patients with this condition are smokers, but occupational and environmental exposures to chemicals, dusts, and secondhand smoke are also causes. COPD is caused by a combination of genetic susceptibility and environmental factors (Capriotti et al., 2020).

When you are doing your examination of someone complaining of shortness of breath (SOB) or difficulty breathing, some questions you should ask would include: do you have a history of smoking or secondhand smoke in your environment, history of alcohol and illicit drug use, what is the frequency of your cough, have you had any wheezing or sputum production, what do you do for a living? Asking these types of questions during the examination will help you get a better idea of what could be causing the SOB or difficulty breathing.

When a provider is trying to find a diagnosis, they will want the patient to perform a couple of different tests. One would be the COPD Assessment Test (CAT) which is a patient questionnaire that would ask some questions and help us get a better idea on how they can breathe and what limitations they might have when it comes to their activity. Another test could include the patient using a spirometer which will tell you how much air the patient is

inhaling and how much they are exhaling. A complete blood count (CBC), blood chemistry panel, chest x-ray, electrocardiogram (ECG), and ABGs should be analyzed (Capriotti et al., 2020). In most mild cases, you should not see much change in majority of the labs.

There are some treatments that will help with this condition but are not going to get rid of it all together. Quitting smoking is a big one because when you quit smoking all together, you can help the COPD not get worse. There are also many medications that you may take daily or just on an as needed (PRN) basis. Some of the treatments include: bronchodilators such as inhalers, inhaled steroids, oral steroids, antibiotics, theophylline, phosphodiesterase-4 inhibitors, lung therapies, managing exacerbations and surgery (if you meet specific requirements). *(*COPD *2020)* In this patient's case, she did stop smoking after 40 years, has been given an inhaler to use PRN and is on supplemental oxygen to help with her symptoms.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). Chronic Obstructive Pulmonary Disease. In *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives* (Second, pp. 504–508). essay, F.A. Davis Company.

Mayo Clinic Staff. (2020, April 15). *COPD*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679#:~:text=Chronic%20obstructive%20pulmonary%20disease%20(COPD,(sputum)%20production%20and%20wheezing.

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.2-5.4		Not Drawn	Patient's RBC could have been low because of blood loss during surgery. (*Low Hemoglobin Count* 2020)
Hgb	12.0-16.0	12.4	*	
Hct	37.0-47.0	38.6	*	
Platelets	130-400	399	*	
WBC	4.8-10.8	7.2	*	
Neutrophils	1.5-7.6	5.0	*	
Lymphocytes	1.4-4.4		*	Patient's low lymphocyte level is likely due to an infection she was fighting off or had just fought off. (*Lymphocytopenia*)
Monocytes	0-0.8	0.7	*	
Eosinophils	0.1-0.6	0.3	*	
Bands	<10%	Not drawn	*	

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	135-148	144	*Not Drawn	
K+	3.3-5.3	5.0	*	
Cl-	99-111	99	*	
CO2	23-29	*Not Drawn	*	
Glucose	70-110		*	Patient's glucose could have been high from a number of things. Some of the possible reasons include surgery, illness,

				infection and being inactive which all apply to the patient. (*Hyperglycemia in Diabetes* 2020)
BUN	**5-25**	**12**	*****	
Creatinine	**0.5-1.4**	**0.8**	*****	
Albumin	**3.4-5.0**	*****	*****	
Calcium	**8.5-10.5**	**10.4**	*****	
Mag	**1.7-2.2**	*****	*****	
Phosphate	**2.8-4.5**	*****	*****	
Bilirubin	**0.0-1.0**	*****	*****	
Alk Phos	**0.73-2.45**	*****	*****	

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	**Clear/yellow**	***Not Drawn**	***Not Drawn**	
pH	**5-8**	*****	*****	
Specific Gravity	**1-1.030**	*****	*****	
Glucose	**0-50**	*****	*****	
Protein	**Neg-20**	*****	*****	
Ketones	**Negative**	*****	*****	
WBC	**0-5**	*****	*****	
RBC	**0-2**	*****	*****	
Leukoesterase	**Neg-25**	*****	*****	

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	**No Growth**	***Not Drawn**	***Not Drawn**	
Blood Culture	**No Growth**	*	*	
Sputum Culture	**No Growth**	*	*	
Stool Culture	**No Growth**	*	*	

Lab Correlations Reference (APA):

Lymphocytopenia. National Heart, Lung and Blood Institute. https://www.nhlbi.nih.gov/health-topics/lymphocytopenia.

Mayo Clinic Staff. (2020, June 27). *Hyperglycemia in Diabetes*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/hyperglycemia/symptoms-causes/syc-20373631.

Mayo Clinic Staff. (2020, September 22). *Low Hemoglobin Count*. Mayo Clinic. https://www.mayoclinic.org/symptoms/low-hemoglobin/basics/causes/sym-20050760.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	**Budesonide (Pulmicort Flexhaler)**	**Pepcid (Famotidine)**	**Lasix (Furosemide)**	**Lioresal (Baclofen)**	**Zofran (Ondansetron HCl)**
Dose	**0.25 mg**	**20 mg**	**2 mg**	**5 mg**	**4 mg**
Frequency	**BID**	**Daily**	**Daily**	**TID**	**PRN q6h**
Route	**Oral Inhalation**	**PO**	**PO**	**PO**	**PO**
Classification	**Corticosteroid**	**Histamine -2 Blocker**	**Loop Diuretic**	**Muscle Relaxant**	**Selective Serotonin Receptor Antagonist**
Mechanism of Action	**Inhibits inflammatory cells and mediators**	**Reduces HCl formation**	**Inhibits sodium and water reabsorption (increase urine)**	**Inhibit transmission of impulses**	**Block serotonin receptors**
Reason Client Taking	**Shortness of breath**	**GERD**	**Increased Edema**	**Pain**	**Nausea/ Vomiting**
Contraindications (2)	**1.Acute asthma episodes 2.Hypersensitivity to Budesonide**	**1.Hypersensitivity to Famotidine 2.Hypersensitivity to other H2-receptor antagonists**	**1.Anuria 2.Hypersensitivity to Furosemide**	**1.Hypersensitivity to Baclofen 2.Seizures**	**1.Hypersensitivity to Ondansetron 2.Concomitant use of apomorphine**
Side Effects/Adverse Reactions (2)	**1.Bronchospasms 2.Respiratory Tract Infections**	**1.Constipation 2.Nausea**	**1.Bladder Spasms 2.Glycosuria**	**1.Depression 2.Hypertension**	**1.Constipation 2.Shortness of breath**

Medications Reference (APA):

Bartlett, A., & Jones, D. W. (2021). *Nurse's Drug Handbook* (21st ed.). Jones & Bartlett Learning, LLC.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:**	**Appears alert and oriented to person, place and time, well groomed, some distress with**

Orientation: **Distress:** **Overall appearance:**	**breathing.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**Skin is pink, dry and warm. No rashes or lesions. Several small bruises scattered on arms. Less than normal quantity, distribution and texture of hair. Some balding and thin texture of hair. Nails without clubbing or cyanosis. Skin turgor has good recoil.** **Braden score is 15 making her a low-risk for pressure sores.**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and neck are symmetrical, trachea is midline without deviation. Bilateral carotid pulses are palpable and normal.** **Bilateral auricles moist and pink without lesions noted.** **Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink, no visible drainage from eyes. Bilateral lids are moist and pink without drainage noted. PERRLA in left eye, right eye does not follow (blindness).** **Septum is midline, left turbinate is red and swollen, right is moist and pink. Bilateral frontal sinuses are nontender to palpitation.** **No teeth, gums are moist and pink, pt. states "does not wear dentures often", tongue is pink and moist.** .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☐** **Edema Y ☐ N ☐** **Location of Edema:**	***Not observed***
RESPIRATORY:	***Not observed***

Accessory muscle use: Y☐ N ☐ **Breath Sounds: Location, character**	
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	***Not observed***
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	***Not observed***
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	***Not observed***

NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	***Not observed***
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	***Not observed***

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
9:30 am	**52**	**125/60**	**20**	**97.1 F** **(tympanic)**	**97%**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
9:45 am	**0**				

Intake and Output (2 points)

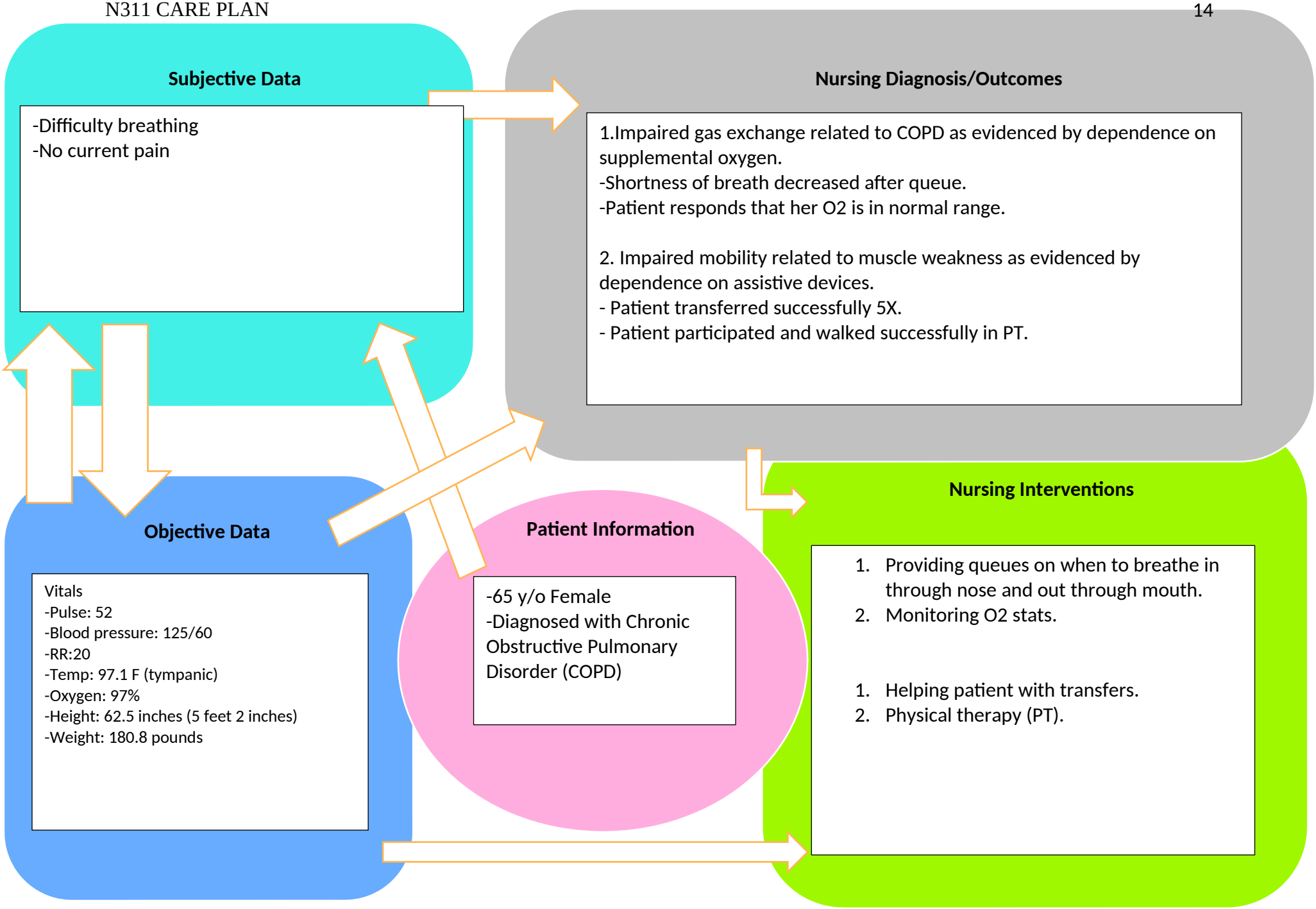
Intake (in mL)	Output (in mL)
Chocolate milk- 120 mL (8:00 am)	**Incontinent X1 and Toilet X1**

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to COPD as evidenced by dependence on supplemental oxygen.	**Dependence on constant supplemental oxygen, SOB upon exertion, prescribed corticosteroid inhaler.**	**1. Providing queues on when to breathe in through nose and out through mouth.** **2. Monitoring O2 stats.**	**Shortness of breath decreased after queue.** **Patient responds that her O2 is in normal range.**
3. Impaired mobility related to muscle weakness as evidenced by dependence on assistive devices.	**Dependence on wheelchair, walker and gait belt during physical therapy, assistance with transferring.**	**2. Helping patient with transfers.** **3. Physical therapy (PT)**	**Patient transferred successfully 5X.** **Patient participated and walked successfully in PT.**

Other References (APA):

Concept Map (20 Points):


Subjective Data
-Difficulty breathing
-No current pain
Nursing Diagnosis/Outcomes
1.Impaired gas exchange related to COPD as evidenced by dependence on supplemental oxygen.
-Shortness of breath decreased after queue.
-Patient responds that her O2 is in normal range.
2. Impaired mobility related to muscle weakness as evidenced by dependence on assistive devices.
- Patient transferred successfully 5X.
- Patient participated and walked successfully in PT.
Objective Data
Vitals
-Pulse: 52
-Blood pressure: 125/60
-RR:20
-Temp: 97.1 F (tympanic)
-Oxygen: 97%
-Height: 62.5 inches (5 feet 2 inches)
-Weight: 180.8 pounds
Patient Information
-65 y/o Female
-Diagnosed with Chronic Obstructive Pulmonary Disorder (COPD)
Nursing Interventions
1. Providing queues on when to breathe in through nose and out through mouth.
2. Monitoring O2 stats.
1. Helping patient with transfers.
2. Physical therapy (PT).